Bearing lengths for extrusion dies: rationale, current practice and requirements for automation 162
N. Miles, G. Evans, A. Middleditch

Extrusion die for in-process compensation of component-errors due to die-elasticity 177
T. Wanheim, R. Balendra, Y. Qin

Superplastic forming technology of aircraft structures for Al–Li alloy and high-strength Al alloy. 183
X. Yuwei, Z. Yiyuan, M. Wenfeng, C. Jainzhong

Finite-element analysis and experimental verification for drawbead drawing processes. 188
C. Kim, Y. Im, Y. Heo, N. Kim, G. Jun, D. Seo

Frictional behaviour of Al359/SiC/20p composite under isothermal and non-isothermal hot-working conditions as a function of surface roughness 195
A.M. de Sanctis, A. Forcellese, S.M. Roberts, P.J. Withers

Salient features in the cold upset-forming of sintered aluminium–3.5% alumina powder composite preforms 201
R. Narayanasamy, K.S. Pandey

Effects of cutting parameters on the scallop size during the milling processes 208
C.-C. Tsao, W.-C. Chen

Rolling of internal threads: Part 1 214
V. Ivanov, V. Kirov

Rolling of internal threads: Part 2 221
V. Ivanov

Multiple-slide transfer presses: A modern production system 226
P. Bogon

Strengthening of cold-setting resin sand by the additive method 239
G. Ding, Q. Zhang, Y. Zhou

Extrusion of TiO_2 ceramic powder paste. 243
L. Chevalier, E. Hammond, A. Poitou

Wear resistance of Al_2O_3/TiB_2 ceramic cutting tools in sliding wear tests and in machining processes 249
D. Jianxin, A. Xing

Prediction of the maximum drawing load in the cup-drawing process of sheet metals. 256
D.-K. Leu

Dynamic behavior modeling for P/M superalloys during hot isostatic pressing. 262
M.C. Zhang, Z.J. Luo, F.C. Zeng

Investigations of new wax-based model materials simulating metal working process. 267
K. Świątkowski, R. Cacko

Physical modelling of metal working processes using wax-based model materials 272
K. Świątkowski

A computer model for relating powder density to composition, employing simulations of dense random packings of monosized and bimodal spherical particles. 277
L.N. Smith, P.S. Midha

Hot rolling of an aluminum alloy using oil/water emulsions 283
M.S. Chun, J.G. Lenard

A study of friction during the lubricated cold rolling of an aluminum alloy 293
J.G. Lenard, S. Zhang

Stress-state dependence of work-hardening behavior in aluminium alloy sheet 302
R. Mahmudi

On a physico-metallurgically justified inter-annealing schedule for copper. 308
W.A. Acho, G.I. Lawal

Improvement of metal forming processes by means of useful effects of plastic friction 314
A.N. Levanov

Automated selection of cutting tools based on solid models. 317
A.C. Lin, C.-L. Wei

Acrylic-acid route for the fast chemical vapour deposition of titanium carbide films 330
S. López, S. Granados, S. Muhl, O. Alvarez-Fregoso, J.A. Chavez-Carvayar

Optimizing flow in plastic injection molding 333
L.W. Seow, Y.C. Lam

New developments in sheet metal forming: Sheet materials, tools and machinery 342
H.-W. Wagener

The numerical simulation of the integral hydrobulging of ellipsoidal shells 358
Z. Yuansong, Z.R. Wang, Y. Shijian

Optimization of the tool geometry in the deep drawing of aluminium 363
M.M. Moshksar, A. Zamanian

A study on flash- and flashless-precision forging by the upper-bound elemental technique 371
J.-H. Lee, Y.-H. Kim, W.-B. Bae

Property improvement in Al–Si alloys through rapid solidification processing 380
R. Dasgupta

The effects of ball- and roller-burnishing on the surface roughness and hardness of some non-ferrous metals 385
A.M. Hassan

Simulation of isothermal forging of compressor disc by combined numerical and physical modelling techniques 392
A. Dutta, A.V. Rao

Development of a three-dimensional finite-element program for metal forming and its application to precision coining . 396
H.-H. Choi, J.-H. Lee, S.-K. Bijun, B.-S. Kang

Study on isothermal precision forging technology for a cylindrical aluminium-alloy housing 403
D.B. Shan, Z. Wang, Y. Lu, K.M. Xue

Design of strain-rate-controlled dies for the die drawing of polymer sheet 407
A. Masoumi, G. Craggs

Surface integrity and fatigue life of turned gamma titanium aluminide 413
A.L. Mantle, D.K. Aspinwall

Analysis of die design for the stamping of a bathtub 421
F.-K. Chen, B.-H. Chiang

Isothermal plastic forming of high melting temperature alloys 429
J. Sinczak, W. Lapkowski, S. Rusz

On the properties and structure of micro-alloyed and copper-bearing hot-rolled steels 434
F.A. Khalid, D.V. Edmonds

Numerical analysis of the arc in pulsed current gas tungsten arc welding using a boundary-fitted coordinate 437
H.G. Fan, Y.W. Shi, S.J. Na

Friction surfacing of metal coatings on steel and aluminum substrate 446
M. Chandrasekaran, A.W. Batchelor, S. Jana

Author Index of Volume 72 453
Contents of Volume 72 454
Errata 457